UNITED STATES GOVERNMENT
FLIGHT INFORMATION PUBLICATION

IFR ENROUTE HIGH ALTITUDE - U.S.

For use at and above 18,000' MSL
HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983

L E G E N D

AIRPORTS

Airports shown have a minimum of 3000' hard surface runway, five-hundred (500) foot clearance per statute mile within five (5) statute miles of the airport, and are lighted. Airports with control towers are shown in blue. Airports without control towers are shown in magenta. Consult the Chart Supplement U.S. (formerly Airport/Facility Directory) to learn if the light schedule is other than sunset to sunrise.

- Civil
- Civil-Military
- Military
- Heliport
- Seaplane Base
- Airport Identifier
- Associated City

NAVAIDS AND COMMUNICATION BOXES

NAVAIDS

VHF/UHF Data is depicted in BLACK
ILS/MLS Data is depicted in MAGENTA

- VOR/DME/TACAN
- VOR/TACAN
- VOR/DME
- VORTAC
- ILS/DME
- ILS/MLS/DME
- Localizer Only
- Marker Beacon
- Compass Locator at ILS/MLS/DME
- Non-Directional Beacon (NDB)
- Non-Directional Radiobeacon (NDB)
- Flight Service Station (FSS), Remote Communications Outlet (RCO), or Automated Weather Observing System (AWOS/ASOS) not associated with a charted NAVAID or airport

COMMUNICATION BOXES

- Control Box Name
- Frequency
- Transmit Only
- Receive Only
- Transmit and Receive
- VOR with TACAN compatible DME
- Location indicates Hiwy Advisory Service is provided on this frequency. TACAN Channels are not assigned to non-fed. stations.
- Crosshatch indicates Limited Availability
- TACAN must be placed in "Y" mode to receive Air-to-Air service
- Automated Weather Broadcast Systems
- ASOS/AWOS - Automated Surface Observing Station/Automated Weather Observing System
- HIWAS - Hiwatch Hiwire Advisory Service
- TWEB - Transcribed Weather Broadcast

Automated weather: when available, a broadcast on the associated NAVAID's frequency.

- NAVAID Box: Voice and Ident
- NAVAID Box: Ident Only
- NAVAID Box: Voice Only
- NAVAID Box: Ident and Voice
- Radio Aid to Navigation
- Radio Aid to Navigation Not Flight Inspected

Frequency/channel shown thru the NAVAID box is received by the NAVAID only.

Shadow NAVAID Box indicates NAVAID with higher service below 20,000 feet.

NAME 409 — All Name and Frequency/Channel are associated with NAVAID

Variant: 10.6E — Service Volume Variation (Applies to VOR, TACAN, VORTAC, VOR/DME, TACAN and associated navigation aids)

FSS Freq's (122.2, 255.4 and emergency 121.5, 243.0) are not shown unless the aid is not on-airport. All FSS airports have 122.2 unless otherwise noted. Limited to Controller in Shadow box indicates Controller Frequency (MHz) is 127.7 and 132.0

- 50 Frequency Protection radials range at 50 NM from the NAVAID
- 25 Frequency Protection radials range at 25 NM. ADs - 25NM
- Limited Facility: Navigational Systems at this location are identified in reverse block. Refer to Chart Supplement U.S. for limitations.

AIR TRAFFIC SERVICES AND AIRSPACE INFORMATION

ROUTE DATA

VHF/UHF Data is depicted in BLACK
ILS/MLS Data is depicted in MAGENTA
RNAV Data is depicted in BLUE

- Jet Route
- ATS Route
- Oceanic Route
- Atlantic Route
- Bahama Route
- Pacific Route
- Caribbean Route
- Unusable Route Segment
- RNAV Route

Only routes in the North Pacific Route System are shown. The RNAV segments are depicted in BLUE. Refer to the North Pacific Route Chart for complete route structure. RNAV/DME/RNP aircraft refer to Advisory Procedure Directive 16-1998 or subsequent.

- Preferred Route (Blue Box) Route ID Box
- Pacific Systems Organized Track (Blue Box)
- Position Reporting Point
- Radial Outbound from a VOR/DME/TACAN
- Reporting Inbound to a VOR/DME/TACAN
- Total Mileage Between Fixes. Not Always Used for NAVAIDS
- Mileage between either Fixes, NAVAIDS and/or Mileage Breakdowns

- Changeover Point (COP). Point from which navigation guidance changes from one NAVAID to the next.
- MEA-20000 Minimum Enroute Altitude (MEA), Lower value at or thru 18,000'
- MAA-50000 Max. Authorized Altitude (MAA), Lower value at or thru 45,000'
- MEA-20000 MEA for GNSS RNAV aircraft. Lower value at or thru 18,000'
- MEA-20000 MEA for DME/DME/IRU RNAV aircraft. Lower value at or thru 18,000'
- MEA and/or MAA Change Over Point (COP)
- Minimum Reception Altitude (MRA)
- Minimum Crossing Altitude (MCA)

ROUTE/AIRWAY NUMBERS

- Pacific Route (PR) Control Zone (PRCZ)
- Air Defense Identification Zone (ADIZ)
- Adiacent ADIZ
- Flight Information Region (FIR)
- Adjacent FIR
- Upper Information Region (UIR)
- Continental FIR and UIR
- Control Area (CTA) or Upper Control Area (UCA)
- International Boundary (may be overwater)
- Offshore/Unverified

AIRSPACE/FIR/UIR INFORMATION

Open area (other) indicates that airspace is Class G.

Shaded boundaries are generally uncontrolled airspace. (Class G)

Class A Airspace

That airspace of the United States from 18,000 feet MSL up to and including flight level 600, and the airspace overlying the waters within 12 nautical miles of the coast of the 48 contiguous States and Alaska up to and including flight level 600.

AIRWAY/ROUTE REQUIREMENTS

- Pilot Controlled Airspace
- Air Traffic Service Airspace
- RNAV Minimum Operational Performance Specifications
- Additional Control Area Data
- Omnidirectional Minimum Altitude
- Official Time Zone

SPECIAL USE AIRSPACE

- Prohibited Area (P-40) "No Entry"
- Restricted Area (R-4201) "Warning Area"
- Caution Area (C-4201) "Caution Area"
- Other Areas (D-4201) "Danger Area"
- Military Operations Area (MOA) "Military Area"
- Alert Area (A-4201) "Alert Area"
- Warning Area (W-4201) "Warning Area"
- Special Use Area

Complete information is detailed in Enclosure

MISCELLANEOUS

2020 Magnetic Line and Station Variation (MLV)
ALL BEARINGS, RADIALS AND COURSES ARE MAGNETIC (GVAR) EXCEPTED WHERE OTHERWISE INDICATED (TRUE). (GVAR) ALL BEARINGS, RADIALS AND COURSES ARE MAGNETIC (GVAR) EXCEPTED WHERE OTHERWISE INDICATED (TRUE).
ALL TIME IS COORDINATED UNIVERSAL TIME (UTC), SHOWN AS LOCAL TIME (LT) IN BLUE BOXES. UTC = LT + (WEST) or - (EAST) is considered equivalent to World Geodetic System 1984 (WGS-84).
† During periods of Daylight Saving Time (DST), effective hours will be one hour earlier than shown. All times shown in LT except for Hawaii.

EXAMPLE OF GROUPING

- Multiple controls for the same or facility which is not part of the same facility group
- MEA 11500
- MEA 11500
- Effective Times of Single Overlap Route
- Alternate MEA
- Minimum Obstacle Clearance
- Holding Pattern
- Holding Pattern Minimum Obstacle Clearance

Magnetic / Radial / Bearing / Course
(as shown on Joint ALTRAP)

Miles Wyndle

MORSE CODE

A	·−	J	·−−−	S	···	1	·−−−−
B	−···	K	−·−	T	−	2	··−−−
C	−·−·	L	·−··	U	··−	3	···−−
D	−··	M	−−	V	···−	4	····−
E	·	N	−·	W	·−−	5	·····
F	··−·	O	−−−	X	−··−	6	−····
G	−−·	P	·−−·	Y	−·−−	7	−−···
H	····	Q	−−·−	Z	−−··	8	−−−··
I	··	R	·−·			9	−−−−·
						0	−−−−−

FOR ADDITIONAL SYMBOLS, INFORMATION REFER TO THE CHART USER'S GUIDE

CRUISING ALTITUDES - U.S.
Are within controlled airspace as assigned by ATC

18,000' MSL to FL060	Above FL060 to FL410 (1,000's Flight Levels)	FL430 and Above
180 - 359	010 - 170	430
360 - 539	190 - 350	470
540 - 719	370 - 530	510
720 - 899	550 - 710	550
900 - 1079	730 - 890	590
1080 - 1259	910 - 1070	630
1260 - 1439	1090 - 1250	670
1440 - 1619	1270 - 1430	710
1620 - 1799	1450 - 1610	750
1800 - 1979	1630 - 1790	790
1980 - 2159	1810 - 1970	830
2160 - 2339	1990 - 2150	870
2340 - 2519	2170 - 2330	910
2520 - 2699	2350 - 2510	950
2700 - 2879	2530 - 2690	990
2880 - 3059	2710 - 2870	
3060 - 3239	2890 - 3050	
3240 - 3419	3070 - 3230	
3420 - 3599	3250 - 3410	
3600 - 3779	3430 - 3590	
3780 - 3959	3610 - 3770	
3960 - 4139	3790 - 3950	
4140 - 4319	3970 - 4130	
4320 - 4499	4150 - 4310	
4500 - 4679	4330 - 4490	
4680 - 4859	4510 - 4670	
4860 - 5039	4690 - 4850	
5040 - 5219	4870 - 5030	
5220 - 5399	5050 - 5210	
5400 - 5579	5230 - 5390	
5580 - 5759	5410 - 5570	
5760 - 5939	5590 - 5750	
5940 - 6119	5770 - 5930	
6120 - 6299	5950 - 6110	
6300 - 6479	6130 - 6290	
6480 - 6659	6310 - 6470	
6660 - 6839	6490 - 6650	
6840 - 7019	6670 - 6830	
7020 - 7199	6850 - 7010	
7200 - 7379	7030 - 7190	
7380 - 7559	7210 - 7370	
7560 - 7739	7390 - 7550	
7740 - 7919	7570 - 7730	
7920 - 8099	7750 - 7910	
8100 - 8279	7930 - 8090	
8280 - 8459	8110 - 8270	
8460 - 8639	8290 - 8450	
8640 - 8819	8470 - 8630	
8820 - 8999	8650 - 8810	
9000 - 9179	8830 - 8990	
9180 - 9359	9010 - 9170	
9360 - 9539	9190 - 9350	
9540 - 9719	9370 - 9530	
9720 - 9899	9550 - 9710	
9900 - 10079	9730 - 9890	
10080 - 10259	9910 - 10070	
10260 - 10439	10090 - 10250	
10440 - 10619	10270 - 10430	
10620 - 10799	10450 - 10610	
10800 - 10979	10630 - 10790	
10980 - 11159	10810 - 10970	
11160 - 11339	10990 - 11150	
11340 - 11519	11170 - 11330	
11520 - 11699	11350 - 11510	
11700 - 11879	11530 - 11690	
11880 - 12059	11710 - 11870	
12060 - 12239	11890 - 12050	
12240 - 12419	12070 - 12230	
12420 - 12599	12250 - 12410	
12600 - 12779	12430 - 12590	
12780 - 12959	12610 - 12770	
12960 - 13139	12790 - 12950	
13140 - 13319	12970 - 13130	
13320 - 13499	13150 - 13310	
13500 - 13679	13330 - 13490	
13680 - 13859	13510 - 13670	
13860 - 14039	13690 - 13850	
14040 - 14219	13870 - 14030	
14220 - 14399	14050 - 14210	
14400 - 14579	14230 - 14390	
14580 - 14759	14410 - 14570	
14760 - 14939	14590 - 14750	
14940 - 15119	14770 - 14930	
15120 - 15299	14950 - 15110	
15300 - 15479	15130 - 15290	
15480 - 15659	15310 - 15470	
15660 - 15839	15490 - 15650	
15840 - 16019	15670 - 15830	
16020 - 16199	15850 - 16010	
16200 - 16379	16030 - 16190	
16380 - 16559	16210 - 16370	
16560 - 16739	16390 - 16550	
16740 - 16919	16570 - 16730	
16920 - 17099	16750 - 16910	
17100 - 17279	16930 - 17090	
17280 - 17459	17110 - 17270	
17460 - 17639	17290 - 17450	
17640 - 17819	17470 - 17630	
17820 - 17999	17650 - 17810	

VFR or VFR On Top 500'
Any VFR flight within Class A airspace must be operated on an IFR clearance, unless otherwise authorized by ATC

No VFR or VFR On Top
authorized above FL285 in RVSM airspace

ADJOINING CHART H-3 · ADJOINING CHART H-4 · ADJOINING CHART H-5 · ADJOINING CHART H-6 · ADJOINING CHART H-7 · ADJOINING CHART H-8
ERRONEOUS TO 127.35 DEC 17
ADJOINING CHART H-2 · ADJOINING CHART H-1
F · G · H · I · J · K
1°-20 NM
Bonita Pk · Amarillo · Dallas · Little Rock · Memphis · Nashville